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PUBLIC RELATIONS EFFECT
ON ORGANIZATION PERFORMANCE:
THE U. S. COAST GUARD

James Frederick VerPlanck

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THESIS

PUBLIC RELATIONS EFFECT ON ORGANIZATION PERFORMANCE: THE U. S. COAST GUARD

by

James Frederick VerPlanck

December 1975

Thesis Advisor: W. J. Haga

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Public Relations Effect
On Organization Performance:
The U. S. Coast Guard

by

James Frederick VerPlanck
Lieutenant, United States Coast Guard
B. S., United States Coast Guard Academy, 1967

Submitted in partial fulfillment of the
requirements for the degree of

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I. INTRODUCTION

A basic question that arises in connection with a discussion of the public relations (PR) function is: what is PR worth? What does PR contribute to the total organization? Roger has captured the elusiveness of the answers, "Measuring public relations effectiveness is only slightly easier than measuring a gaseous body with a rubber band."

That which is difficult to measure is expensive to measure, and organizations have not been inclined to spend money on PR measurement. There has been a tendency for management to rely upon PR practitioners' own yardsticks for determining the success of PR efforts. PR practitioners have sought without success, a measure that would display the benefits of PR to management. The United States Coast Guard funds a public relations/public affairs program that is designed to present favorable information about the USCG to selected audiences. "The primary objective of Coast Guard public affairs is to assist the Service in the accomplishment of basic missions by keeping the public continuously informed of Service objectives and activities. An informed public will better be able to comply with Coast Guard standards for safety of life and property and protection of the environment and maritime resources."[1] The management

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[1] USCG Public Affairs Manual (CG-247) Amendment 1, para. 101.A, page I-1, 1975.

of the USCG Public Affairs Office has attempted to develop a quantitative measure of PR effectiveness.[2]

An organization PR effort may lead to media exposure which, in turn, may bring audience exposure. A naive practitioner may believe that this exposure is an end in itself. It is not. Exposure to a PR message may change audience attitudes which, in turn, may modify individual behaviors. Again, this is not the end that is sought. Modified behavior may alter an organization by changing its output. It is this effect upon output that must be sought by PR practitioners.

The purpose of PR is to make the social environments of an organization favor its output. PR practitioners attempt to modify the social environments by exposing the media and the public to select information about their employing organization.

PR practitioners accept as axiomatic the causal link between media exposure and effect upon organization output. To deny this causal link would be to question whether PR has any effect upon organization output, thereby entertaining the logical conclusion that PR is superflous.

PR practitioners and management have tried measuring the volume of media exposure and/or changes in audience attitudes resulting from a PR program. These attempts stop short of measuring the purpose for which PR exists: altering

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[2] Chief, Office of Public and International Affairs Memo G-APA/83 to CG Chief of Staff, Subject: Public Affairs Cost Benefit Data Research Funds; request for, 27 December 1974.

organization output. There have been no known attempts to completely bypass the causal chain and look for changes in organization output attributable to PR activity.

Assume that PR activity does have some effect upon its employing organization. If such an organization has a quantifiable output, then the input effect of PR activity should be visible in that output. Indeed, unless PR activity results in a favorable change in organization output, its economic justification is weakened.

This study attempts to analyze relationships between PR activity inputs and organization output measures in USCG districts. Public relations efforts and organization operational output data were gathered from archival records.

II. NATURE OF THE PROBLEM

A. THE NEED FOR EVALUATION OF PUBLIC RELATIONS EFFORT

> Perhaps the greatest irony of public relations is that millions of dollars are spent for it and management isn't sure it's getting its money's worth.[3]

Many PR practitioners and organization managers believe that the greatest deficiency of public relations is the lack of measures of its effectiveness. Practitioners and managers are compelled to retreat to subjective judgements. Some claim that PR must be accepted as an axiomatic good; that PR effectiveness cannot be measured because its benefits are intangible.[4]

Where managers seek explicit cost figures and precise measures of effectiveness, they want to be able to budget PR and evaluate its results. In their quest for a visible indicator of results, practitioners have devised intricate reports that convey to management that the PR effort achieved, e.g., so many column-inches of media space, or so much radio and television air time. If the ultimate objective of PR was to achieve media exposure, this measure might be indicative of PR success. However, the measurement of media exposure falls far short of measuring organization output attributable to PR effort.

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[3] Zollo, Burt, The Dollars and Cents of Public Relations, p. 106, McGraw-Hill, 1967.

[4] Ibid., p. 107.

There is controversy in the field of PR as to what constitutes a valid measure of effectiveness. Managers who are trained to think in terms of cost/benefit ratios try to measure effects against costs of an input. Other managers believe that the purpose of measurement is not to establish precise value in terms of dollar cost, but to consider what the objectives of an effort are worth at the onset.

The implication is that if results are too difficult to assess quantitatively, you are better off to evaluate the objectives and simply assume that the effort will achieve the objective. Public relations objectives, however are seldom designed to achieve a single result. Therefore, the achievement of a single objective should not be its sole basis of measure.[5] Time lags between a typical PR effort and its results confuse measurement. The temptation to pattern PR effectiveness measures after those used by advertising and sales promotion programs is great, but they cannot be assumed valid. The differing goals, impact, and time frame encompassed by a PR effort are quite different.

B. REASONS WHY PUBLIC RELATIONS HAS NOT BEEN SUCCESSFULLY EVALUATED

There has been much discussion and wide-spread agreement concerning the difficulty of evaluating PR efforts. Most

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[5] Wright, T. and Evans, H. S., Public Relations and the Line Manager, P. 75, American Management Assn., 1964.

PR practitioners, when faced with the difficulty and cost of evaluation, ignore the task and rely upon their "common sense" to assess the results.[6] Once an organization has paid the price of a PR program, and its management has been subjectively satisfied that the effort was reasonably successful, that organization will not be inclined to spend money to achieve an estimate of success when that estimate may be only slightly better than their subjective evaluation. Public relations efforts face the dual problems of results which elude quantification, and prohibitively high costs of evaluation. The expense is a result of the degree to which PR efforts remain intangible. If PR efforts can be shown to have a measurable effect upon organization output, then the expense and the difficulty of measuring the success of PR efforts should be reduced.

C. TYPES OF PUBLIC RELATIONS EVALUATION TECHNIQUES

PR practitioners, seeking to answer the question, "how is it possible to measure public relations results in meaningful terms?," have tried several approaches. Over the years, they have pointed to numerical tabulations of one sort or another, e.g., inches of news space, attendance at special events, sales leads, requests for information, or similar figures, as indicators of the success of PR programs.

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[6] Marston, J. E., The Nature of Public Relations, p. 168, McGraw-Hill, 1963.

Press coverage has been an especially popular evaluation tool. Some PR practitioners still use press-clip books as evidence of their worth, but other practitioners and managers have come to realize that these indicators are not conclusive evidence of the worth of PR. They may reveal exposure of a PR message before an audience, but they do not necessarily prove anything else. Press clippings have been the standard measure of PR results, and traditions die hard; but press clippings can be misleading because the mere tallying of column-inches of media exposure does not measure the effect that such exposure has upon that organization. Press clippings represent the output of a PR staff, but only the input into the causal chain which leads to a change in organization output.

Computers have been used to compile data on the volume, distribution, and degree of impact of media exposure resulting from PR efforts. PR Data Incorporated's PREPAR (Public Relations Electronic Planning and Review) documents the efficiency of PR material generated by a public relations staff, then evaluates the newsclips and media space received against the priorities which were established for a PR campaign. Each PR release is coded for input to a computer. The resulting newsclips are similarly coded. The computer program provides information about the number of priority messages in each story printed, the number of inches of media space obtained, and the readership of each publicity outlet.

Such a program is an advance over manual compilation methods. However, the analysis may be misleading. It measures only parameters about media and potential audience exposure. It says nothing about the probable or measurable impact that this exposure may have upon the output of the subscribing organization.[7] PREPAR was defended by the president of PR Data who said, "The key to measurement is the newsclip . . . [it] is the most concrete, measurable result of a public relations program."[8] There can be no argument about the measurability of the newsclip. The question that remains to be answered is, what does measurement of media exposure have to do with evaluating the effect of public relations effort upon organization output? A change in the level of media exposure does not necessarily result in a change in organization output. There is evidence which suggests that more favorable media exposure is better than less, but the degree of organization output change has not been determined relative to the amount of media exposure. If that relationship could be established, then and only then, would measurement of media exposure be a valid measure of PR effectiveness.

The Hill and Knowlton PR counseling firm used a computer for comparing type of audiences reached by publicity to the

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[7] Budd, J. F., Jr., An Executive's Primer on Public Relations, p. 1975, Chilton Book Co., 1969.

[8] Zollo, p. 119.

objectives of a PR program. It essentially counted clippings. Hill and Knowlton also attempted to program the impact of a PR release by appraising the release wording relative to words which would affect a "model public" stored in the computer's memory. Lacking a reliable definition of a "model public," this novel effort was scrapped.[9] Another approach to measuring PR effectiveness is opinion sampling. Some organizations poll editors and writers for their opinions of an organization's PR program. Editors and writers usually know their field and generally are assumed to transcend product or brand loyalties. They are thus able to give supposedly unbiased insights into the quality of a PR program. However, editors and writers themselves are seldom the target audience of a PR program, even if they are crucial intermediaries. It is better to sample the target audience at large even though it may be more expensive than polling the media. Sampling the public is difficult because of the problem of finding a truly random sample from a desired audience. Determination of the characteristics of the desired audience can be a considerable problem. There are additional problems associated with pre and post-test sampling that make the opinion poll subject to error and inaccuracies. Moreover, a PR practitioner is still left to wonder where an opinion change means anything of value to an organization. The

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[9] Budd, pp. 179, 180.

degree to which opinion change leads to changes in organization output has not been determined. The goal of PR practitioners is not to change public opinion, but to beneficially affect the output of their organization.

There have been attempts to relate changes in sales curves to changes in public relations activity. Such an approach represents an attempt to relate PR efforts to a portion of organization output. The situation is complicated by the fact that, in the corporate world, PR programs, advertising campaigns, and sales promotions almost always overlap. The difficulty with such empirical relationships is that when sales are down, those responsible seek scapegoats elsewhere; when sales are up, each element takes the credit. When many programs are used simultaneously, it is difficult to pinpoint the effect attributable to any one program.[10]

There have been some long range projects proposed which would investigate whether objective data can be gathered on what happens to an organization when it embarks upon a public relations program. These studies were to examine correlations between public relations activity and indices of organization health to determine whether PR had any influence on profit or growth. Controlled experiments could be devised in which differences in organization health would give insights into how PR affects an organization. Preliminary steps in this

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[10] Zollo, p. 115.

direction have been both frustrating and discouraging.[11] One such study, in which a researcher attempted to gather evidence of PR activity, was abandoned after considerable time had been spent looking for a cohesive evidential account of actual PR activity. In the meantime, the question, "what effect does PR activity have upon organization output?," goes unanswered. What remains are several types of imprecise evaluation:

1. Tangible Evidence of PR Activity--inches of media space, comments, requests, and inquiries reflect inputs but give no indication as to what effect they have on PR program goals. PR practitioners delude themselves by thinking that if a PR message is read or heard by somebody, the desired effect results.

2. Opinion Sampling--views of media representatives or persons sampled from a potential audience are solicited. The media are not the target audience for PR messages and the audience sample may not be truly representative of the whole target audience.

3. Management by Objective--management must define what the objectives of a PR program are worth to their organization. The assumption that the objectives are achievable by a PR program does not account for any measure of PR effort effectiveness.

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[11] Finn, p. 135.

While managers, PR practitioners, and research firms seek a better way to measure relations efforts scientifically, there have been few previous attempts to measure PR effectiveness in terms of organization output. If PR is beneficial, then the effect of PR should be observable in organization output. In the public sector, the output of services should be effected by a PR program, and the change in output should be measurable.

This study examines the effect that changes in PR activity level may have upon the output of services provided by the United States Coast Guard.

II. METHODOLOGY

A. DESIGN OF DATA COLLECTION

1. Measuring Organization Output

A program is defined here as the principal actions required to achieve a significant objective; it is a major mission oriented Coast Guard endeavor, which fulfills statutory or executive requirements. There are 14 operational programs presently being carried out by the U. S. Coast Guard. Only one of these, Commercial Vessel Safety, is not carried out either wholly or in large part by the Coast Guard operating fleet.

The Coast Guard fleet consists of 239 cutters, over 2,000 small boats, and approximately 220 aircraft.[12] The accomplishment of programs by fleet activities is considered to be the organizational output of the Coast Guard.

Fleet operational activity is reported and recorded on forms CG-3123 A, B, and C.[13] (See Appendices A, B, and C.) Procedures and directions for the preparation and interpretation of these forms are contained in CG Commandant Instruction 3123.7D, issued 5 June 1973. Fleet operations

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[12] A cutter is a vessel over 65 feet long with an assigned crew. Small boats are under 65 feet long with no permanent crew.

[13] Rev. 7-73.

data is accumulated by means of these reports, which are submitted quarterly for each operational unit in the fleet. Operating unit utilization data is reported under several categories. Each employment category identifies the purpose for which fleet units (resources) were used. These reporting categories are generally translatable directly to programs of the same name. The 23 different employment categories contained on the forms correspond to 15 different programs and 8 non-program activities.

The use of fleet resources is reported in terms of missions, employment hours, and resource hours. The number of times a category is employed under different sets of orders is reported as the number of missions devoted to that category. The share or portion of the time underway on a mission that is credited to an employment category is reported as resource hours. Employment hours differ from resource hours in that several employment categories can be affected simultaneously, which would allow the number of employment hours credited on a given mission to be considerably greater than the length of the mission. Resource hours credited to employment categories must total exactly the amount of time that the resource was underway. Employment hours reflect the multi-mission capability of fleet resources. For the purpose of this study, employment hours is considered to be the best indicator of program support by the fleet. Employment hours reported by fleet resources forms the basis for computation of the measure of operational output used in this study.

There are 16 employment categories which correspond to 15 programs supported by the fleet. The 16 categories and the programs which they support are shown in Table 1. Both Cadet and Officer Candidate Training and the Reserve Training categories support the training program. Reporting is by separate category because the Reserve portion of the Coast Guard budget is funded by a congressional appropriation category of its own. The remaining 14 programs are funded from the Operating Expense appropriation category. Separate reporting categories are necessary for cost accounting purposes but the Cadet and Officer Candidate Training and Reserve Training categories can be merged into one for the purposes of this study. The seven employment categories consisting of: Operator Training, Cooperation with other Agencies, Proficiency Training, Test, Ferry, Administrative, and Non-Mission Movement do not directly benefit any program. They are support categories that contribute only indirectly to the accomplishment of Coast Guard programs. As such, they were excluded from consideration in the computation of the operational output measure.

The 16 employment categories which directly support Coast Guard programs are considered to represent the fleet's contribution to program accomplishment and organization output.

Data from the Abstract of Operations (form CG-3123 A, B, and C) for fiscal years 1974 and 1975, (calendar 1 July 1973 through 30 June 1975), was obtained for all USCG fleet

Table 1

Program Support by Employment Category

Employment Category	Program Supported	Remarks
Search and Rescue (SAR)	Search and Rescue	
Military Operations (MILOPS)	Military Operations	
Port Safety and Security (PSS)	Port Safety and Security	
Enforcement of Laws & Treaties (ELT)	Enforcement of Laws & Treaties	
Marine Environment Protection (MEP)	Marine Environmental Protection	
Short Range Aids to Navigation (SRAtoN)	Short Range Aids to Navigation	
Radio Navigation Aids (RA)	Radio Navigation Aids	
Operator Training		Indirect support of other programs
Bridge Administration (BA)	Bridge Administration	
Recreational Boating Safety (RBS)	Recreational Boating Safety	
Domestic Icebreaking (IO)	Icebreaking Operations	
Military Preparedness (MP)	Military Preparedness	
Polar Operations	Icebreaking Operations	
Marine Science Activities (MSA)	Marine Science Activities	

(cont.)

Table 1 (cont.)

Employment Category	Program Supported	Remarks
Cadet and OC Training	Training	
Reserve Training	Training	
Cooperation with other Agencies		Support only
Proficiency Training		Aircraft pilot training.
Administrative		Aircraft flights for administrative purposes.
Test		Aircraft post-overhaul flight testing.
Ferry		Movement of an aircraft to a new base of operation.
Non-Mission Movement		Movement of Cutters or small boats without program accomplishment.
Ocean Station	Ocean Station	A once active program; the mission was eliminated in 1974 except for one station on a seasonal basis.

resources. Excluded from the data were any resources which were under the direct control of Coast Guard Headquarters or under control of a headquarters unit such as the CG Academy. By and large, such units contribute little fleet resource support of programs other than the Training Program. Additionally, many of these Headquarters-controlled resources are not directly supported by any of the twelve District Public Affairs Offices. Some have their own public affairs element and others are supported by CG Headquarters Public Affairs Branch. A direct one-to-one correspondence between a resource and a supporting District PAO was not possible in the case of a Headquarters-controlled unit. The remaining fleet resources are under the administrative or operational control of one of the twelve Coast Guard District Commands. Each of these has its own Public Affairs Office to support its fleet resources.

Program support category data was summed for all resources, by district, for each reporting period. There are twelve districts and eight reporting periods included in this study. These reporting periods, numbered one through eight, correspond to the eight fiscal quarters beginning 1 July 1973 and ending 30 June 1975. The total number of program support hours (employment hours) for each of the 96 possible combinations of district and quarter, constituted the measure of organization output of the USCG during fiscal years 1974 and 1975. This measure will be known as the dependent variable in future discussion.

It is perhaps important to note here that all of the employment categories were weighted equally in the computation of the dependent variable. This does not presume that all Coast Guard programs are intrinsically of equal importance. Certainly most would agree that the SAR Program is more important in terms of immediate human value than is, for example, Bridge Administration. The fact remains, however, that programs are not funded on the basis of their contribution to human welfare; indeed, programs are not directly funded at all. Coast Guard internal funding is by facility and unit. For cost accounting and budget purposes, an hour spent by a particular type of fleet resource is costed at the same rate irrespective of the employment category it benefits during that hour. That is, costing is determined by time underway and not on the basis of what programs were supported. Theoretically, what an organization spends on a given program is a measure of the value of that program to the organization. The USCG values its programs equally in terms of costing. A consumer of Coast Guard outputs may place different values upon USCG programs. One way in which a consumer might demonstrate the value he attaches to Coast Guard programs is through his congressional representatives. Aggregate consumer values may be expressed in terms of congressional authorizations and appropriations. USCG outputs might then be altered by changing statutory requirements or missions. The modification of basic missions or statutory responsibilities through public relations efforts is not defined as

an objective of the USCG Public Affairs Program. Statutory requirements and missions are considered here, as given. Therefore, the decision to consider all employment hours by a particular fleet resource of equal value, is a reasonable procedure.

It is recognized that all fleet resources are not necessarily equal in their ability to accomplish program support tasks. Therefore, the decision to equate employment hours of cutter, small boats, and aircraft is unsound. An aircraft, for example, is capable of accomplishing many missions in much less time than could a floating resource. Thus, the hours spent on those missions by aircraft should have a higher value or weight, in terms of contribution to a program, than those hours spent by a floating resource. The composition of the fleet, i.e., the portion of different resource types, varies considerably from district to district. Program accomplishment needs vary considerably from district to district as well. The Domestic Icebreaking category, for example, is seldom benefitted by fleet resources in southern districts. Recreational Boating Safety may be a year-around activity in warmer climates, but seasonal in northern districts. Fleet resource types are deployed so as to make effective use of their ability to support program needs of a district. Thus, the effectiveness mix of the fleet may vary greatly from one district to another. A quantitative measure of effectiveness (MOE) for fleet resources does not exist, and determination of such an MOE

for every resource type over every area of program support would be quite difficult.

2. Measuring Public Relations as an Input

The Coast Guard public relations function is accomplished largely by a Public Affairs staff component in each of the twelve Coast Guard District offices. The Public Affairs Office (PAO) staff administers the public relations tasks for the district office and the subordinate commands within that district (including all fleet resources located, home-ported, or administratively controlled by that district command). There is some output of public relations material by the individual units and fleet resources in each district, but largely this is in reaction to media inquiry. Such activities are minor compared to the PR activity of the district PAO.

The district PAO document their PR effort by means of the Public Information Activities Quarterly Report.[14] (See Appendix D.) Various categories of public relations and intra-service related activities are reportable on this form. To a certain extent, the form is self-explanatory, but it contains some information which is subject to interpretation. There is no supplemental directive to define what each reporting category should contain. Basically, the report contains quantitative information about the number of photographs taken, films distributed, TV and radio spots distributed,

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[14] Form CG-2964, rev. 3-67.

and similar activities. There are several areas where non-quantitative information is solicited in the form of remarks. The report is considered to be a summary of the public relations activities carried out by a district PAO over a three month period. This period coincides with that of the Abstract of Operations.

The information contained in this report is considered to be an indication of the activity level or output of a Coast Guard Public Affairs Office. The raw data elements are numeric, (except for remarks which were not included in the computation of the PR output measure). These raw data elements were converted to a common unit of measure (the dollar) by means of a cost accounting model. This model was initially proposed by the Public Affairs Branch at Coast Guard Headquarters to satisfy the requirements for a Program Operating Cost Report (POCR). The basic model was modified slightly for the purpose of this study. The initial POCR model has since been altered by the Headquarters Public Affairs Branch to incorporate new and revised information. The POCR model transforms raw PR data from form CG-2964 into dollar amounts by computing the value of the task performed. These values are inputed costs, or costs that would have been incurred had these tasks or services been contracted for or purchased at current market rates.

Raw data for each element of the POCR model comes from CG-2964 with one exception. The Fleet Home Town News element comes from reports which are submitted by the Fleet

Home Town News Center (FHTNC) directly to Coast Guard Headquarters. This data is aggregated into quarterly figures which represent the total number of FHTNC release forms generated by the district PAOs and the fleet resources within their respective districts. Many of the fleet resources such as major cutters and air stations have collateral duty public relations personnel whose main contribution to the PR function consists of responding to media inquiries and submitting locally prepared releases to the FHTNC. It is suspected that the amount of FHTNC releases initiated by fleet resources is some function of the attention given to this activity by the district PAOs. It would be reasonable to consider FHTNC data as being representative of the amount of activity given to this POCR element by the district PAOs.

The elements of the POCR model as modified for this study are:

a. Photo Jobs
b. Films Distributed
c. Spot News Releases
d. Feature Releases
e. Radio Spots
f. TV Spots
g. Personal Appearances
h. Fleet Home Town News Releases

It is recognized that these eight elements do not comprise the total public relations effort. However, the

remaining categories on form CG-2964 are either disregarded by the POCR model or require a subjective evaluation of the raw data in order to convert it into dollar value scores. The eight included elements represent a broad coverage of the PR effort and are wholly quantitative. The formulae for conversion of the raw PR data elements into dollar values are contained in Appendix E. Once the raw PR data elements were transformed into dollar value scores, these scores were summed by district for each reporting period. The resulting dollar figure is the PR output measure or independent variable.

There was one report which could not be obtained and therefore was not included in the data set.[15] The 95 data points correspond on a one-to-one basis with the operational output (dependent variable) data points.

B. DATA ANALYSIS

The data consisted of 95 data points for the independent variable and 96 data points for the dependent variable. Bivariate correlation analysis was carried out. Pairwise deletion of data was used for computation of all coefficients so that there were, at most, 95 data points included in each computation. The analysis consisted of computing the Pearson correlation coefficients for various combinations of the independent and dependent variables. Significance tests were obtained for each correlation coefficient, derived from the

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[15] CG District 12 for quarter ending 12/31/73.

use of Student's t with N-2 degrees of freedom (where N is the number of data points used). A one-tailed test of significance was used.

The Pearson correlation was computed for 43 different data configurations.[16] These configurations involved nine different time lags between the variables. Then the configurations which represented the same amount of time lag were combined and analyzed. The independent variables were then summed over time quarters one through four while the dependent variables were summed over quarters five through eight. The resulting data set was used to generate a Pearson correlation coefficient. The opposite data structure was also examined (where the dependent variables were summed over the first four quarters and the independent variables were summed over the last four quarters). Pearson correlation coefficients were generated from this data set as well.

C. DESCRIPTION OF NEW DEPENDENT VARIABLES

Two of the 16 employment categories which formed the measure of organization output were considered to be more sensitive to public relations activity than the others. These two employment categories are Search and Rescue (SAR) and Recreational Boating Safety (RBS). Most of the PAO public relations output is considered to be supportive of these two programs. They are highly visible to the public

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[16] A configuration is a given pair of variables that are the focus of analysis at a given point in the discussion, determined by the quarter(s) from which they are taken.

audience, and operational activity in support of these two programs is considered responsive to public need and desire. Programs such as Military Preparedness, Icebreaking Operations, Short Range Aids to Navigation, and others are considered to be influenced more by statutory requirements or climatological factors than by public opinion. Assuming that USCG organization output is more responsive to environmental factors other than public opinion, (in most of the employment categories which formed the dependent variable), two new dependent variables were created. The SAR data element became the first new dependent variable. The RBS data element became the second. Both new variables were paired with the PR activity measure (independent variable) in the same manner as the former dependent variable. Pearson correlations were generated for these two new dependent variables for many of the same configurations previously described.

IV. PRESENTATION AND ANALYSIS OF FINDINGS

A. THE HYPOTHESIS

This study sought to test a null hypothesis:

> Changes in prior public relations activity levels have no effect upon subsequent organization output in the U. S. Coast Guard.

An alternative hypothesis is that changes in PR activity do lead to changes in Coast Guard operational output. If the null hypothesis could be rejected, then the effect of PR activity upon organization outputs would have empirical foundation. Moreover, if PR activity does effect outputs, then how long does it take? Analysis of correlations between PR activity, as the independent variable, and USCG operations, as the dependent variable in a later quarter is one way to answer this question.

B. FINDINGS RELATIVE TO TOTAL OPERATIONAL OUTPUT

The initial analysis here considered of generating Pearson correlations for each of 43 data configurations. The independent variables for a given quarter were paired with the dependent variables for (a) the previous fiscal quarter, (b) the same quarter, and (c) each of several subsequent quarters. There were twelve data points, (one for each USCG district) in each configuration except for those which involved the independent variable for fiscal quarter

ending 12/31/73.[17] The correlation coefficients generated from this data are listed in Table 2. Significant correlations are indicated by a single asterisk ($p < .05$), or a double asterisk ($p < .01$). Table 2 shows that 17 of the 43 configurations resulted in significant correlations. All of the significant correlations are positive, and only one correlation in the matrix is negative. The correlations involving the independent variable for the fifth quarter are highly significant ($p < .01$) over all data configurations examined. PR activity levesl in the fifth quarter had a strong, highly significant correlation ($p < .01$) with operational output levels in the previous quarter, the same quarter, and each of three subsequent quarters. This finding suggests that changes in operational output are at once: (a) the result of PR activity, (b) coincident with PR activity, and (c) preceed changes in PR activity.

There are only two significant correlations from the configurations which represent data taken from the same quarter for both variables. That these correlations are neither strong nor consistently significant is not surprising. One would not expect the effect of PR activity to be seen in the same period that it occurs.

There are three significant correlations ($p < .05$) in the seven configurations in which the independent variable lags the dependent variable by one quarter. This is the

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[17] Data from CCGD 12 was not available at the time of this study.

TABLE II

Correlations Between PR Activity Levels & Operational Output

OPERATIONAL OUTPUT

	Quarter	1	2	3	4	5	6	7	8
PR ACTIVITY	1	.467	.426	.418	.564*	.578*	.501*	.294	.633*
	2	.555*	.333	.096	.478	.601*	.263	.111	.524*
	3		.209	.240	.388	.466	.168	.047	.442
	4			.035	.109	.110	.023	-.134	.210
	5				.774**	.720**	.852**	.813**	.773**
	6					.662*	.242	.212	.516*
	7						.603*	.396	.656*
	8							.392	.549*

* = $p < .05$

** = $p < .01$

so-called "reactive" case. These findings give reason to suspect that PR activity levels react to changes in operational output, instead of the other way around.

The evidence of PR's effect upon operational output is significant in six of the eight configurations which represent the pairing of the PR activity level in preceeding quarters with the operational output measure of the eighth quarter. The findings indicate that PR activity levels in quarters one, two, five, six, seven, and eight had a significant correlation with operational output in the eighth quarter. This suggests that operational output in the eighth quarter responded simultaneously to PR activity levels in five of the six preceeding quarters and PR activity in the concurrent quarter. Clearly, there is no evidence of a structure among the significant correlations in Table 2.

Table 3 represents an aggregation of the data which was used to generate Table 2. The data points from each of the configurations which represent the same time difference between the variables were combined to provide a larger data base for correlation analysis. The time difference between the variables can take on any integer value from zero to seven, inclusive. For example, pairing the independent variable from quarter 1 with the dependent variable from quarter 6 would result in a time difference of 5 (quarters). Similarly, the independent variable from quarter 2 paired with the dependent variable from quarter 7 would yield the same time difference. The combination of data configurations

which yield the same time difference forms the basis for the correlations listed in Table 3. The figure (-1) represents the configuration in which the independent variable lags the dependent variable by one quarter. The size of the data set varied from a minimum of 12 to a maximum of 95 data points. All nine of the correlations are positive, with six being significant. Most significant was the configuration in which the independent variable leads the dependent variable by one quarter. This correlation (r = .469) is highly significant (p = .00001), but not indicative of strong linearity between the variables. That this correlation is positive indicates generally, that an increase in PR activity coincides with an increase in operational output in the following quarter. Furthermore, this correlation is stronger and more significant than that of the opposite configuration, (where the independent lags the dependent variable by one quarter). Thus, causality may be assumed. This assumption of causality is strengthened by significant correlations where operational output lags PR activity by two, four, five, and seven quarters. It would be unrealistic to compare this correlations with those of their opposite configurations since there is no theoretical reason for PR activity levels to be governed by prior operational output levels. If PR efforts are at all reactive to changes in operational output, these changes should immediately follow the events which caused the changes in output so as to provide timely information to audiences. Any reactive PR activity should be evident in the same or following quarter.

TABLE III

Correlations Between PR Activity and Operational Output: Aggregated Data

Independent Variable (t_i) - Dependent Variable (t_i)

Time Period Difference	Correlation Coefficient	Significance	Number of Data Points
-1	.115	.150	83
0	.275	.003**	95
1	.469	.00001***	83
2	.288	.007**	71
3	.114	.195	59
4	.259	.039*	47
5	.439	.004**	35
6	.158	.236	23
7	.633	.014*	12

* = $p \leq .05$

** = $p \leq .01$

*** = $p \leq .001$

In order to test the supposition that the effect of PR activity is cumulative, the independent variables were summed, by USCG district, over quarters one through four. The dependent variables were similarly summed over quarters five through eight. The resulting data set was used to generate the correlation coefficients which appear in Table 4. This cumulative aggregation of data provided a means with which to compare the PR activity levels of one fiscal year with the operational output levels of the next fiscal year. The correlation is positive and significant ($p < .05$). Looking only at these figures, there might be reason to believe that a net increase in PR activity one year would result in a net increase in operational output the next year. Causality cannot be inferred without comparing this correlation with that of the opposite configuration (where the PR activity levels summed over quarters five through eight are paired with the operational output levels summed over quarters one through four). Again, this is the "reactive" case, but with the independent variable lagging the dependent variable by an average period of one year. The resulting data set was used to generate the correlation coefficients which appear in Table 5. The correlation here is strongly positive and highly significant ($p < .01$). This finding suggests that the independent variable is more reactive to changes in operational output than it is causative. A clear conclusion cannot be drawn from the correlation figures alone, since

TABLE IV

Correlation Between Cumulative Variables: Normal Configuration

Correlation Coefficient	Significance	Number of Data Points
.529	.047 *	11

TABLE V

Correlation Between Cumulative Variables: Reactive Configuration

Correlation Coefficient	Significance	Number of Data Points
.659	.009 **	12

* = $p < .05$

** = $p < .01$

these figures were generated from different sized data sets.[18] No cohesive structure has emerged from the findings to indicate a clear relationship between these two variables.

C. FINDINGS RELATIVE TO NEW DEPENDENT VARIABLES

No definite pattern emerged in the relationship between PR activity levels and the measure of total operational output. However, if there are counteracting effects upon different programs which comprise the operational output measure that are due to PR activity, then a summation of these program activity scores might cancel out certain PR effects. For example, increased PR activities might lead to a decrease in Search and Rescue employment hours because Recreational Boating Safety employment hours increased. A measure of output based upon a summation of these two categories might not show a net change resulting from the PR effort.

Assuming that PR activities would have little or no effect upon certain employment categories and programs which formed the operational output measure, alternative measures were devised. The two employment categories which were considered most likely to be responsive to PR activity were Search and Rescue, and Recreational Boating Safety. These two programs were used, individually, as the basis for two new dependent variables. Each of these two new variables

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[18] Missing data for CCGD 12 for quarter 2 accounts for this difference.

was paired with the PR activity measure to generate a new series of correlation coefficients. The results of these analyses appear in Tables 6 and 7. The construct of Tables 6 and 7 is similar to that of Table 3. The difference is in the data which comprises the dependent variable.

Table 6 lists the results of aggregating the data points which represent the same time differences between the reporting periods for the PR activity measure and the SAR employment hours measure. The coefficients in Table 6 are of mixed direction and little significance. The sole significant correlation is positive, but indicative of a weak linear relationship between the variables. This coefficient represents the configuration in which the independent variable from a given quarter is paired with the dependent variable from the same quarter. The statistical significance of this lone pair may be due to the large number of data points used in its computation. Nothing in Table 6 suggests that PR activity has any effect upon the amount of effort devoted by the fleet to the SAR program.

Table 7 is similar to Table 6 except that its dependent variable consists of the number of employment hours devoted to the Recreational Boating Safety Program. Because operational activity in this program is highly visible to the boating public, it gets a considerable portion of the total PR effort. It is reasonable to assume that PR activity should be visible in the portion of the operational output

TABLE VI

Correlations Between PR Activity and SAR Employment: Aggregated Data

Independent Variable (t_i) - Dependent Variable (t_i)

Time Period Difference	Correlation Coefficient	Significance	Number of Data Points
-1	.086	.220	83
0	.196	.028 *	95
1	.063	.286	83
2	.124	.152	71
3	-.023	.431	59
4	-.186	.103	48
5	-.210	.109	36
6	-.080	.355	24
7	.155	.315	12

* ($p \leq .05$)

TABLE VII

Correlations Between PR Activity and RBS Employment: Aggregated Data:

Independent Variable (t_i) - Dependent Variable (t_i)

Time Period Difference	Correlation Coefficient	Significance	Number of Data Points
-1	.155	.081	83
0	.057	.291	95
1	.105	.172	83
2	.037	.381	71
3	-.051	.350	59
4	.104	.241	48
5	-.023	.447	36
6	-.119	.289	24
7	.108	.369	12

devoted to the Recreational Boating Safety employment category, if PR has any effect at all upon operational output.

The correlation coefficients listed in Table 7 are weak, mixed in direction, and wholly insigificant. The only correlation that even approaches significance is the figure which represents the "reactive" configuration. In this configuration, the dependent variable leads the independent variable by one quarter. No evidence here suggests a relationship between PR activity levels and Recreational Boating Safety Program accomplishment by fleet resources.

D. SUMMATION OF THE FINDINGS

The findings, in their statistical form alone, do not lead to a concise definitive relationship between public relations activity and organization output in the U. S. Coast Guard. The scattered significant correlations in the analysis of PR activity levels and total operational output do not support an alternative hypothesis. The null hypothesis cannot be rejected.

The strongest indication that PR activity results in a change in operational output comes from the figures in Table 3. However, the finding that PR activity effects operational output, as evidence in Table 3, is not supported by the analysis which led to the figures in Table 4. If there was a consistent effect of PR activity upon operational output,

it should have shown up in Table 4. The findings in Table 6 and 7 did nothing to strengthen the supposition that PR activity has an effect upon programs which have high public visibility. The findings based upon Tables 6 and 7 do not reject the null hypothesis.

V. IMPLICATIONS OF THE FINDINGS

Changes in public relations activity must either relate to changes in organization output or have no effect upon organization output. If there is a relationship between these two variables, then changes in PR activity must either: (1) react to earlier changes in organization output, (2) influence organization output at some later time, or (3) be coincident with changes in organization output. If there is no clear indication that PR activity relates to organization output in one of these three ways, then it must be concluded that there is no relationship between PR activity and organization output. Only the second situation shows that PR activity affects output; the other two situations show that PR activity is irrelevant.

The figures in Table 2 provide no clear indication of a relationship between PR activity and total operational output. The fact that there were highly significant correlations ($p < .01$) does not clarify the findings. Those correlations imply that changes in PR activity simultaneously: (a) react to, (b) coincide with, and (c) precede changes in operational output. If the Table 2 correlations were largely significant only where the dependent variable lags the independent variable, then a strong case could be made for PR's effect upon organization output. Such is not the case.

The six significant correlations with the dependent variable from quarter 8 further confuse the findings. These correlations do not establish how long it might take for the effect of PR activity to be seen in organization output. Where significant correlations occur without pattern or structure (as in Table 2), it is difficult to accurately model relationship between the variables. Certainly, Table 2 provides no evidence of a definitive relationship between PR activity and organization output.

The findings based upon Table 3 offer but limited support for the alternate hypothesis that PR activity has an effect upon organization output. The highly significant correlation ($p = .00001$), where the dependent variable lags the independent variable by one quarter, implies that PR activity does influence operational output. This implication is not wholly supported by the remaining Table 3 correlations. Significant correlations occur where the dependent variable lags the independent variable by two, four, five, and seven quarters. This implies that the same PR activities which influenced output in the following quarter also influenced operational output in the same quarter and four of the six subsequent quarters as well. There is theoretically nothing to prevent PR activity from affecting output in several different time periods. However, the situation is inconsistent because there is no significant correlation either three or six quarters hence. If PR influences operational output in future periods at all, it should do so consistently. Yet

there are no significant correlations across all quarters. There is just one correlation greater than .500 in Table 3, i.e., where operational output lags PR activity by seven quarters. The remaining correlation coefficients are indicative of a weak relationship between the variables.

If the effect of PR is cumulative, as one would be led to suspect from the literature, then the findings based upon the figures in Tables 4 and 5 should support this assumption. In fact, Tables 4 and 5 offer no support for the assumption that the effect of PR activity is cumulative. The correlation in Table 5 is both stronger and more significant than that of Table 4. This implies that PR does not have as much cumulative effect upon operational output as output has upon PR activity. PR is reacting to changes in organization output rather than influencing it. If PR merely reacts to the output of an organization, then it has no beneficial effect. This runs counter to conventional lore in the PR literature. PR practitioners do not believe that their efforts are ineffectual.

Further analysis attempted to give the PR activity measure ample opportunity to display its influence by selecting organization outputs that should be sensitive to PR activity. The Search and Rescue and Recreational Boating Safety employment category statistics were chosen to deliberately bias a test of PR influence an organization outputs. The results still did not support an alternate hypothesis. (See Figures in Tables 6 and 7.) The null hypothesis cannot be rejected! PR activity has shown no effect upon organization output.

Thus, PR practitioners who claim PR activity is beneficial to organizations must provide data to counter these findings. In the meantime, the use of organization resources for PR must be considered superfluous to the accomplishment of programs in the USCG.

VI. CONCLUSION

What if all the publicity in the world has no effect on organization output? If PR has no effect on output, then the question of whether its results are tangible is of no consequence. PR practitioners must deal with this: the effect of PR work must show up, somehow and sometime, in organization outputs. If PR has no effect upon organization output, then there is no sound economic reason for it to continue. If PR programs do not result in a favorable change in the output of an organization that funds these programs, then a PR practitioner cannot justify his function.

The results of this study have shown that PR cannot claim that it is beneficial to an employing organization. Should organizations continue to fund PR programs without evidence of its ability to affect organization output? What can PR offer to an organization? The assumption that PR has an effect on organization goals is no longer justified.

Evaluations and speculation as to the worth of PR must mature into empirical investigations. The acid test of PR effectiveness is organization output. Rational organization managers must carefully examine the contributions their PR programs make to system outputs. If the measure of their current PR activity does not correlate with subsequent organization output, funding for PR activities has questionable

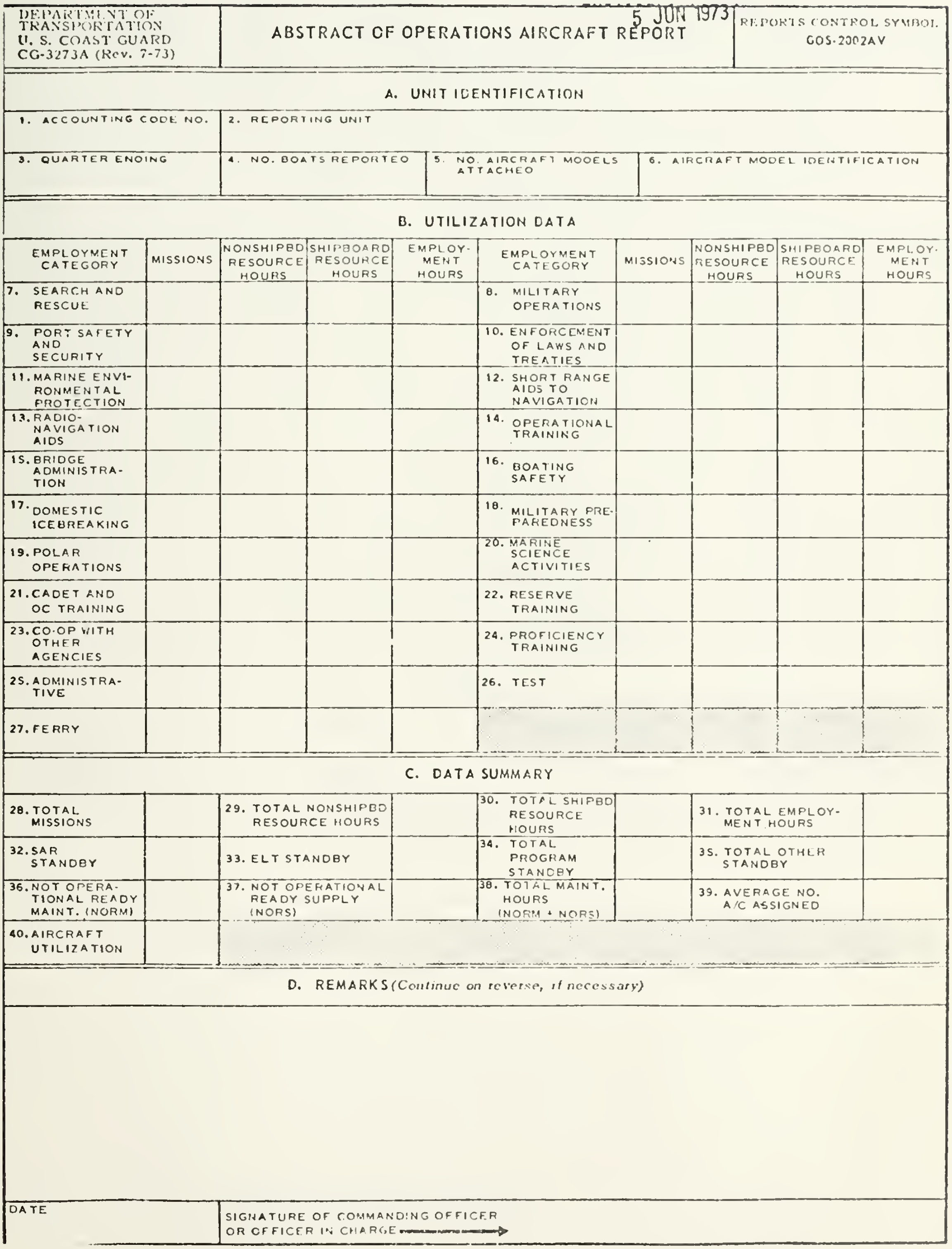
justification. PR makes sense only when it can be used to modify the social environments of its employing organization, in a manner that is favorable to that organization.

The USCG is rather unique among the armed services in being able to identify peacetime organization outputs in quantifiable terms. Other services are not able to show explicit measures of organization output as well as the USCG program accomplishment measures. If organization output defies measurement, how can PR practitioners justify their efforts? The answer lies in an examination of similar organizations that have quantifiable output measures. Assume that the intermediate goals of PR (modification of social environments) is the same for all the armed forces. Assume further that the PR techniques employed by all the armed forces are similar to those used by the USCG. If PR has been shown to have no effect upon the quantifiable output of the USCG, what reason is there to believe that PR activity on behalf of any service will affect their non-quantifiable outputs? To put it bluntly, the author sees little economic justification for any of the U. S. armed forces to engage in PR activity.

An alternate hypothesis to counter the implication that PR is without effect upon organization output is that the results of this study were, in part, an artifact of the numerous assumptions and arbitrary values incorporated in the formulae which convert raw PR data into dollar values. The POCR formulae represent an initial attempt to quantify

PR efforts by converting these efforts into dollar amounts. Effectiveness of PR activity may have been affected and partially hidden by inaccuracies in these formulae. The best hope for justifying PR programs, in either the public or private sectors, lies in the formulation of a measure of PR activity that perhaps more accurately reflects the economic worth of PR efforts. The POCR formulae used in this study might be redefined to better assess the dollar value of PR efforts as an input. If as a result, PR is able to show a consistent correlation with organization output, then PR practitioners and their managements can find some foundation for the belief that PR is beneficial to organizations. If such formulae cannot be derived, then PR practitioners must face the challenge that PR can be fairly described as irrelevant, superfluous, and dispensable.

APPENDIX A



5 JUN 1973

DEPARTMENT OF TRANSPORTATION U. S. COAST GUARD CG-3273A (Rev. 7-73)	ABSTRACT OF OPERATIONS AIRCRAFT REPORT	REPORTS CONTROL SYMBOL GOS-2002AV

A. UNIT IDENTIFICATION

1. ACCOUNTING CODE NO.	2. REPORTING UNIT		
3. QUARTER ENDING	4. NO. BOATS REPORTED	5. NO. AIRCRAFT MODELS ATTACHED	6. AIRCRAFT MODEL IDENTIFICATION

B. UTILIZATION DATA

EMPLOYMENT CATEGORY	MISSIONS	NONSHIPBD RESOURCE HOURS	SHIPBOARD RESOURCE HOURS	EMPLOYMENT HOURS	EMPLOYMENT CATEGORY	MISSIONS	NONSHIPBD RESOURCE HOURS	SHIPBOARD RESOURCE HOURS	EMPLOYMENT HOURS
7. SEARCH AND RESCUE					8. MILITARY OPERATIONS				
9. PORT SAFETY AND SECURITY					10. ENFORCEMENT OF LAWS AND TREATIES				
11. MARINE ENVIRONMENTAL PROTECTION					12. SHORT RANGE AIDS TO NAVIGATION				
13. RADIO-NAVIGATION AIDS					14. OPERATIONAL TRAINING				
15. BRIDGE ADMINISTRATION					16. BOATING SAFETY				
17. DOMESTIC ICEBREAKING					18. MILITARY PREPAREDNESS				
19. POLAR OPERATIONS					20. MARINE SCIENCE ACTIVITIES				
21. CADET AND OC TRAINING					22. RESERVE TRAINING				
23. CO-OP WITH OTHER AGENCIES					24. PROFICIENCY TRAINING				
25. ADMINISTRATIVE					26. TEST				
27. FERRY									

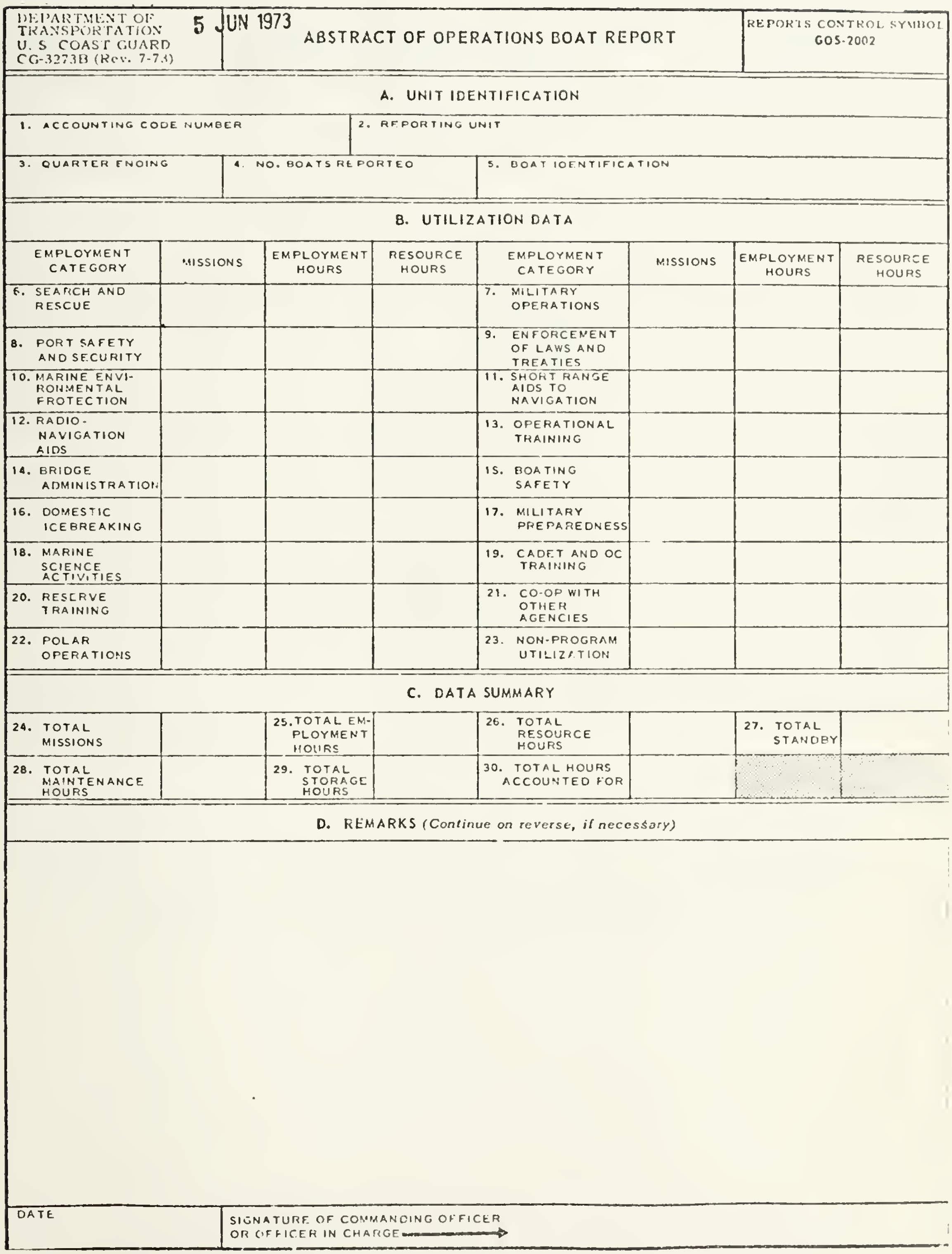
C. DATA SUMMARY

28. TOTAL MISSIONS		29. TOTAL NONSHIPBD RESOURCE HOURS		30. TOTAL SHIPBD RESOURCE HOURS		31. TOTAL EMPLOYMENT HOURS	
32. SAR STANDBY		33. ELT STANDBY		34. TOTAL PROGRAM STANDBY		35. TOTAL OTHER STANDBY	
36. NOT OPERATIONAL READY MAINT. (NORM)		37. NOT OPERATIONAL READY SUPPLY (NORS)		38. TOTAL MAINT. HOURS (NORM + NORS)		39. AVERAGE NO. A/C ASSIGNED	
40. AIRCRAFT UTILIZATION							

D. REMARKS *(Continue on reverse, if necessary)*

DATE	SIGNATURE OF COMMANDING OFFICER OR OFFICER IN CHARGE →

APPENDIX B



DEPARTMENT OF TRANSPORTATION U. S. COAST GUARD CG-3273B (Rev. 7-73) 5 JUN 1973	ABSTRACT OF OPERATIONS BOAT REPORT	REPORTS CONTROL SYMBOL GOS-2002

A. UNIT IDENTIFICATION

1. ACCOUNTING CODE NUMBER	2. REPORTING UNIT

3. QUARTER ENDING	4. NO. BOATS REPORTED	5. BOAT IDENTIFICATION

B. UTILIZATION DATA

EMPLOYMENT CATEGORY	MISSIONS	EMPLOYMENT HOURS	RESOURCE HOURS	EMPLOYMENT CATEGORY	MISSIONS	EMPLOYMENT HOURS	RESOURCE HOURS
6. SEARCH AND RESCUE				7. MILITARY OPERATIONS			
8. PORT SAFETY AND SECURITY				9. ENFORCEMENT OF LAWS AND TREATIES			
10. MARINE ENVIRONMENTAL PROTECTION				11. SHORT RANGE AIDS TO NAVIGATION			
12. RADIO-NAVIGATION AIDS				13. OPERATIONAL TRAINING			
14. BRIDGE ADMINISTRATION				15. BOATING SAFETY			
16. DOMESTIC ICEBREAKING				17. MILITARY PREPAREDNESS			
18. MARINE SCIENCE ACTIVITIES				19. CADET AND OC TRAINING			
20. RESERVE TRAINING				21. CO-OP WITH OTHER AGENCIES			
22. POLAR OPERATIONS				23. NON-PROGRAM UTILIZATION			

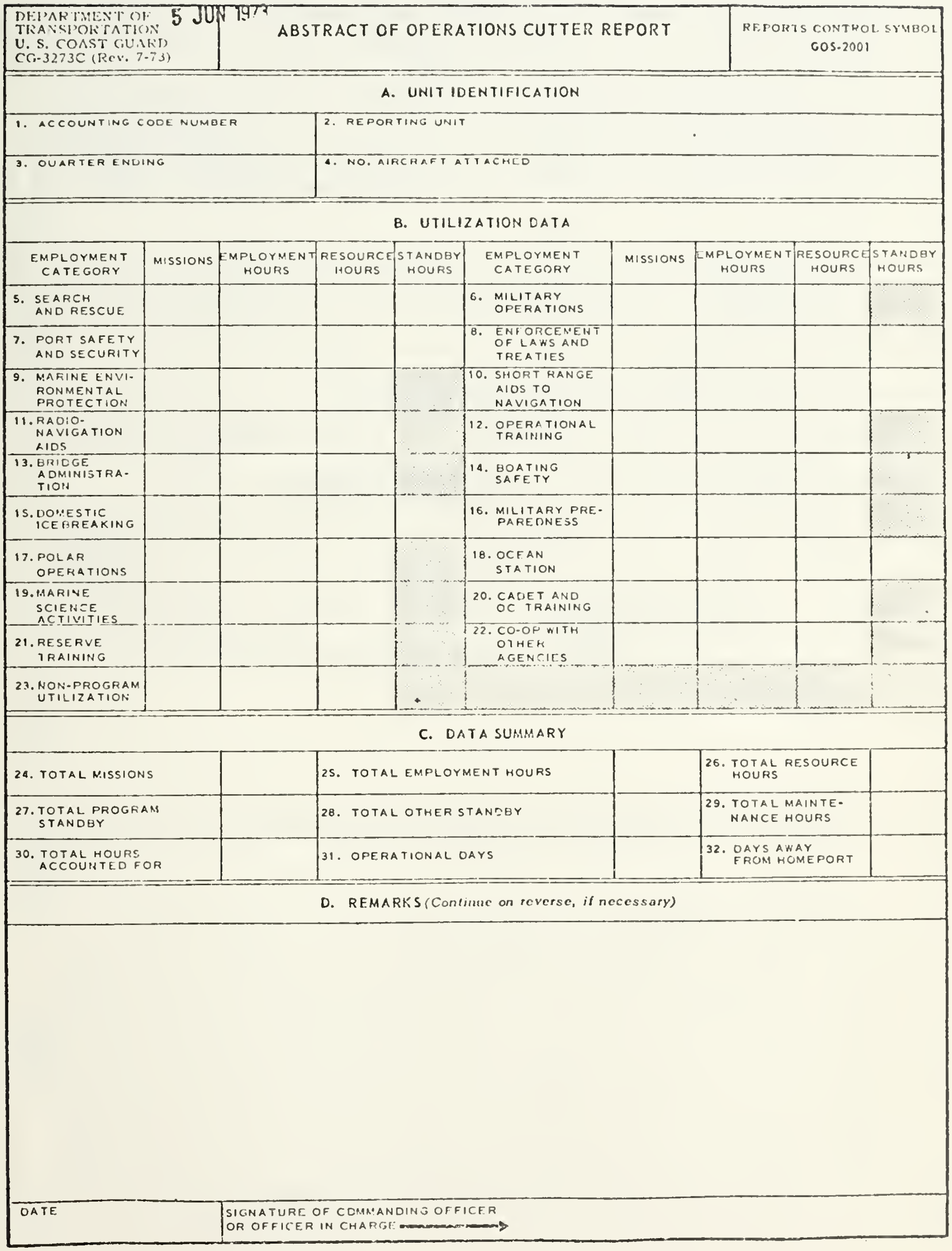
C. DATA SUMMARY

24. TOTAL MISSIONS		25. TOTAL EMPLOYMENT HOURS		26. TOTAL RESOURCE HOURS		27. TOTAL STANDBY	
28. TOTAL MAINTENANCE HOURS		29. TOTAL STORAGE HOURS		30. TOTAL HOURS ACCOUNTED FOR			

D. REMARKS *(Continue on reverse, if necessary)*

DATE	SIGNATURE OF COMMANDING OFFICER OR OFFICER IN CHARGE →

APPENDIX C



DEPARTMENT OF TRANSPORTATION U. S. COAST GUARD CG-3273C (Rev. 7-73) 5 JUN 197	**ABSTRACT OF OPERATIONS CUTTER REPORT**	REPORTS CONTROL SYMBOL GOS-2001

A. UNIT IDENTIFICATION

1. ACCOUNTING CODE NUMBER	2. REPORTING UNIT
3. QUARTER ENDING	4. NO. AIRCRAFT ATTACHED

B. UTILIZATION DATA

EMPLOYMENT CATEGORY	MISSIONS	EMPLOYMENT HOURS	RESOURCE HOURS	STANDBY HOURS	EMPLOYMENT CATEGORY	MISSIONS	EMPLOYMENT HOURS	RESOURCE HOURS	STANDBY HOURS
5. SEARCH AND RESCUE					6. MILITARY OPERATIONS				
7. PORT SAFETY AND SECURITY					8. ENFORCEMENT OF LAWS AND TREATIES				
9. MARINE ENVIRONMENTAL PROTECTION					10. SHORT RANGE AIDS TO NAVIGATION				
11. RADIO-NAVIGATION AIDS					12. OPERATIONAL TRAINING				
13. BRIDGE ADMINISTRATION					14. BOATING SAFETY				
15. DOMESTIC ICEBREAKING					16. MILITARY PREPAREDNESS				
17. POLAR OPERATIONS					18. OCEAN STATION				
19. MARINE SCIENCE ACTIVITIES					20. CADET AND OC TRAINING				
21. RESERVE TRAINING					22. CO-OP WITH OTHER AGENCIES				
23. NON-PROGRAM UTILIZATION									

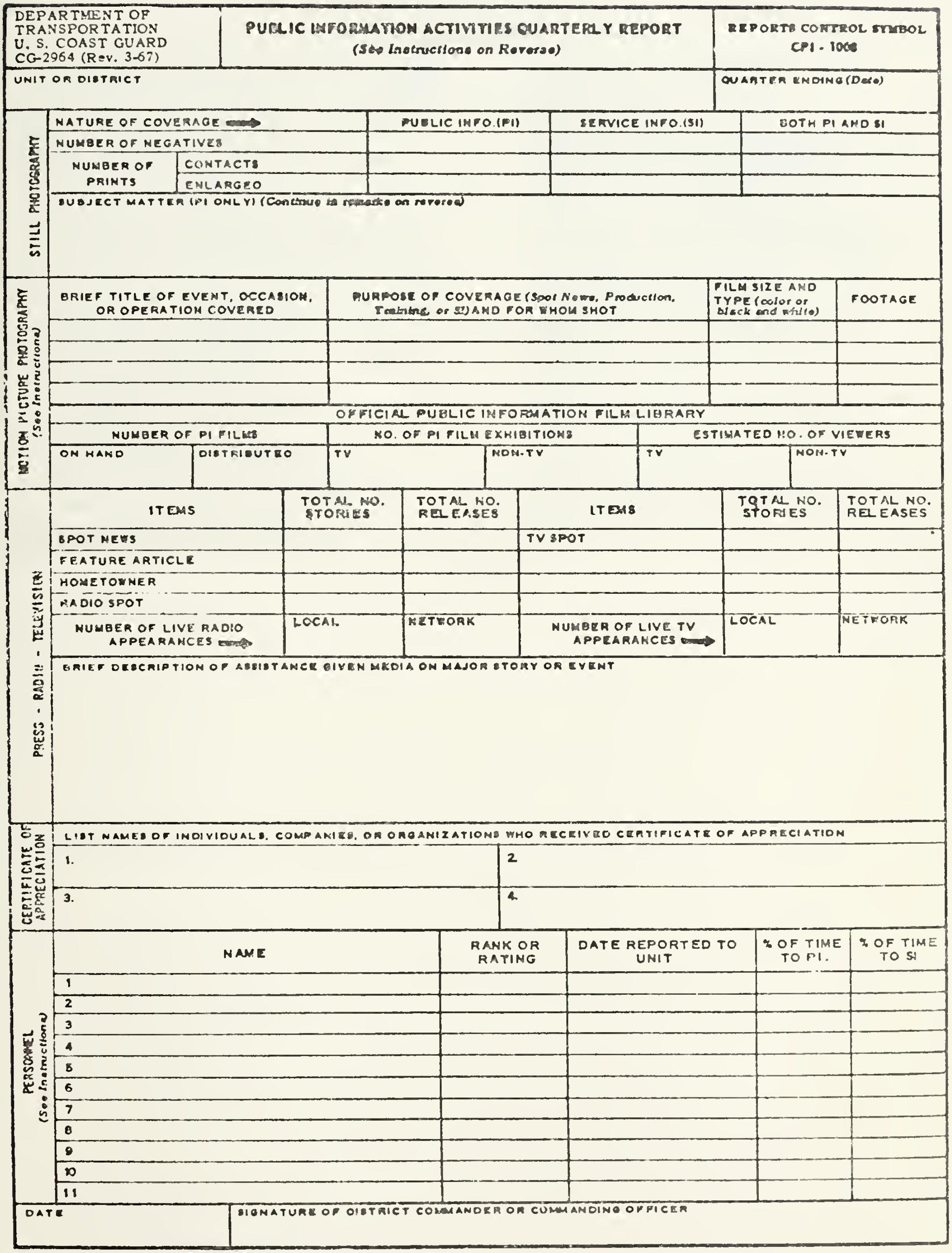
C. DATA SUMMARY

24. TOTAL MISSIONS		25. TOTAL EMPLOYMENT HOURS		26. TOTAL RESOURCE HOURS	
27. TOTAL PROGRAM STANDBY		28. TOTAL OTHER STANDBY		29. TOTAL MAINTENANCE HOURS	
30. TOTAL HOURS ACCOUNTED FOR		31. OPERATIONAL DAYS		32. DAYS AWAY FROM HOMEPORT	

D. REMARKS *(Continue on reverse, if necessary)*

DATE	SIGNATURE OF COMMANDING OFFICER OR OFFICER IN CHARGE →

APPENDIX D



DEPARTMENT OF TRANSPORTATION U. S. COAST GUARD CG-2964 (Rev. 3-67)	**PUBLIC INFORMATION ACTIVITIES QUARTERLY REPORT** *(See Instructions on Reverse)*	REPORTS CONTROL SYMBOL CPI - 1006
UNIT OR DISTRICT		QUARTER ENDING *(Date)*

STILL PHOTOGRAPHY	NATURE OF COVERAGE ⟶		PUBLIC INFO.(PI)	SERVICE INFO.(SI)	BOTH PI AND SI
	NUMBER OF NEGATIVES				
	NUMBER OF PRINTS	CONTACTS			
		ENLARGED			
	SUBJECT MATTER (PI ONLY) *(Continue in remarks on reverse)*				

MOTION PICTURE PHOTOGRAPHY *(See Instructions)*	BRIEF TITLE OF EVENT, OCCASION, OR OPERATION COVERED	PURPOSE OF COVERAGE *(Spot News, Production, Training, or SI)* AND FOR WHOM SHOT	FILM SIZE AND TYPE *(color or black and white)*	FOOTAGE

OFFICIAL PUBLIC INFORMATION FILM LIBRARY						
NUMBER OF PI FILMS		NO. OF PI FILM EXHIBITIONS		ESTIMATED NO. OF VIEWERS		
ON HAND	DISTRIBUTED	TV	NON-TV	TV	NON-TV	

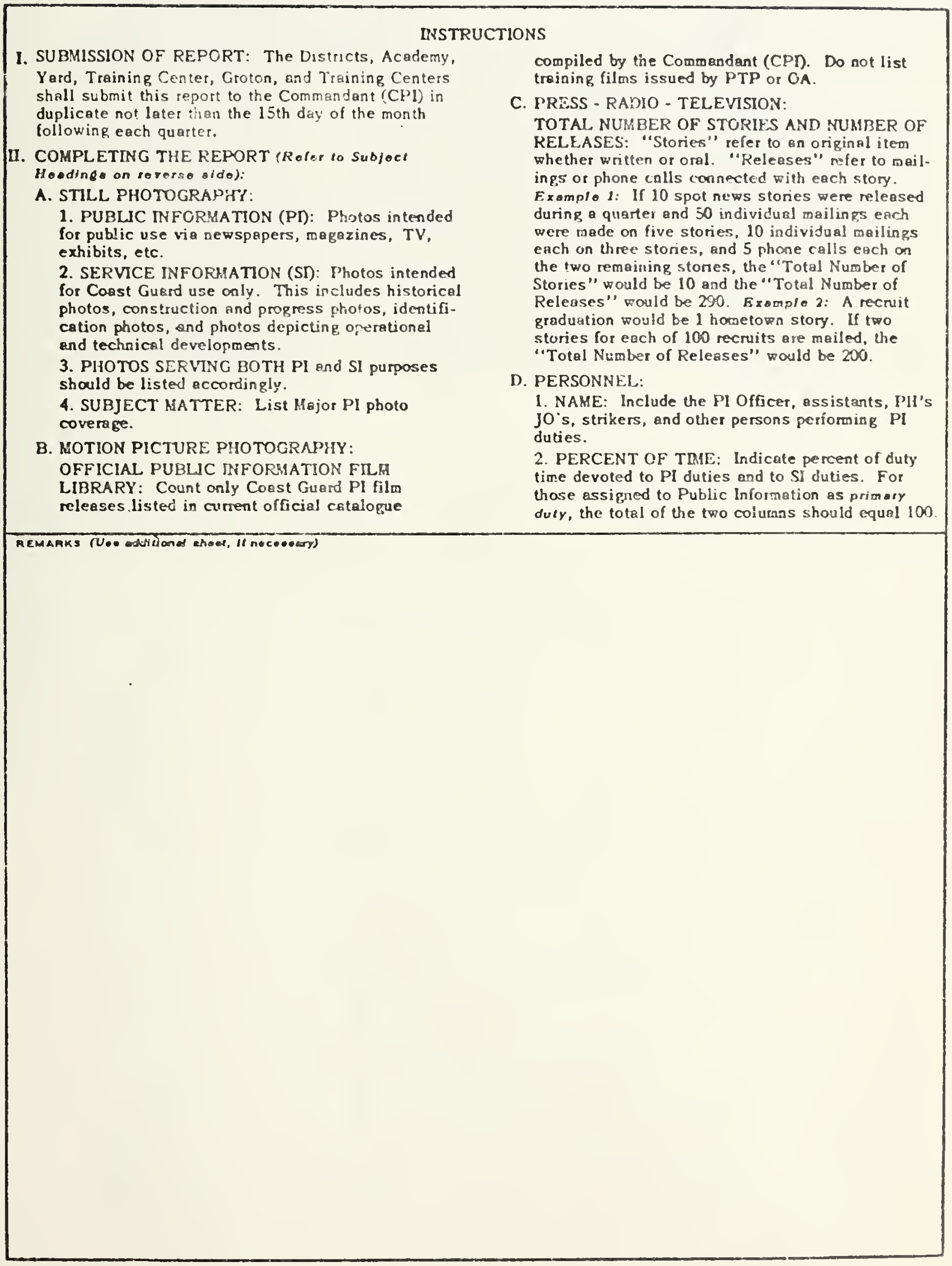
PRESS - RADIO - TELEVISION	ITEMS	TOTAL NO. STORIES	TOTAL NO. RELEASES	ITEMS	TOTAL NO. STORIES	TOTAL NO. RELEASES
	SPOT NEWS			TV SPOT		
	FEATURE ARTICLE					
	HOMETOWNER					
	RADIO SPOT					
	NUMBER OF LIVE RADIO APPEARANCES ⟶	LOCAL	NETWORK	NUMBER OF LIVE TV APPEARANCES ⟶	LOCAL	NETWORK
	BRIEF DESCRIPTION OF ASSISTANCE GIVEN MEDIA ON MAJOR STORY OR EVENT					

CERTIFICATE OF APPRECIATION	LIST NAMES OF INDIVIDUALS, COMPANIES, OR ORGANIZATIONS WHO RECEIVED CERTIFICATE OF APPRECIATION	
	1.	2.
	3.	4.

PERSONNEL *(See Instructions)*	NAME	RANK OR RATING	DATE REPORTED TO UNIT	% OF TIME TO PI.	% OF TIME TO SI
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				

DATE	SIGNATURE OF DISTRICT COMMANDER OR COMMANDING OFFICER

APPENDIX D (cont.)



INSTRUCTIONS

I. SUBMISSION OF REPORT: The Districts, Academy, Yard, Training Center, Groton, and Training Centers shall submit this report to the Commandant (CPI) in duplicate not later than the 15th day of the month following each quarter.

II. COMPLETING THE REPORT *(Refer to Subject Headings on reverse side):*

A. STILL PHOTOGRAPHY:

1. PUBLIC INFORMATION (PI): Photos intended for public use via newspapers, magazines, TV, exhibits, etc.

2. SERVICE INFORMATION (SI): Photos intended for Coast Guard use only. This includes historical photos, construction and progress photos, identification photos, and photos depicting operational and technical developments.

3. PHOTOS SERVING BOTH PI and SI purposes should be listed accordingly.

4. SUBJECT MATTER: List Major PI photo coverage.

B. MOTION PICTURE PHOTOGRAPHY:

OFFICIAL PUBLIC INFORMATION FILM LIBRARY: Count only Coast Guard PI film releases listed in current official catalogue compiled by the Commandant (CPI). Do not list training films issued by PTP or OA.

C. PRESS - RADIO - TELEVISION:

TOTAL NUMBER OF STORIES AND NUMBER OF RELEASES: "Stories" refer to an original item whether written or oral. "Releases" refer to mailings or phone calls connected with each story. *Example 1:* If 10 spot news stories were released during a quarter and 50 individual mailings each were made on five stories, 10 individual mailings each on three stories, and 5 phone calls each on the two remaining stories, the "Total Number of Stories" would be 10 and the "Total Number of Releases" would be 290. *Example 2:* A recruit graduation would be 1 hometown story. If two stories for each of 100 recruits are mailed, the "Total Number of Releases" would be 200.

D. PERSONNEL:

1. NAME: Include the PI Officer, assistants, PH's JO's, strikers, and other persons performing PI duties.

2. PERCENT OF TIME: Indicate percent of duty time devoted to PI duties and to SI duties. For those assigned to Public Information as *primary duty*, the total of the two columns should equal 100.

REMARKS *(Use additional sheet, if necessary)*

APPENDIX E

POCR Formulae

	Element	Formula	Description
a.	Photo Jobs	(N ÷ 15) x \$50 = A	N = PI + SI + (PI&SI) photos enlarged. 15 is an arbitrary average number of photos taken per job. \$50 is an arbitrary estimate of the average commerical value of a photo job.
b.	Films Distributed	N x . 1 x 4 x 14 x \$34 = B	N = the number of films distributed. .1 is an arbitrary estimate of the ratio of films used by TV stations to those distributed. 4 is an arbitrary estimate of the number of times a film is shown. (1) 14 is an estimate of the average length in minutes of a Coast Guard motion picture. \$34 is an estimate of the average value of one minute of spot TV air time. (2)
c.	Spot News	N x .1 x 6 x \$28 = C	N = the number of copies of spot news releases distributed. .1 is an arbitrary estimate of the ratio of releases printed to those distributed. 6 is an arbitrary estimate of the average length in column-inches of each release printed. \$28 is an estimate of the value of a column-inch of newspace. (3)

APPENDIX E (cont.)

	Element	Formula	Description
d.	Features	N x .05 x 12 x $28 = D	N = the number of copies of feature releases distributed. .05 is an arbitrary estimate of the ratio of releases printed to those distributed. 12 is an arbitrary estimate of the length in column-inches of each feature release printed. $28 is same as c. above.
e.	Radio Spots	N x 4 x $10 = E	N = the number of radio spots distributed. 4 is an arbitrary estimate of the average number of times each spot was used. $10 is the estimated value of a thirty second radio spot.(4)
f.	TV Spots	N x 4 x 4 x $32 = F	N = the number of TV spots distributed. 4 is an arbitrary estimate of the average number of uses of each TV spot distributed. $32 is the estimated value of a thirty second local TV spot.(5)
g.	Personal Appearances		
	1. Radio		
	(a) Local	N x $30 = G_1	N = the number of appearances of Coast Guard personnel on a local radio station. $30 is an estimate of the average value of each radio appearance.(6)

APPENDIX E (cont.)

Element	Formula	Description
(b) Network	$N \times \$625 = G_2$	N = the number of appearances of Coast Guard personnel on a radio network. $625 is an estimate of the average value of each network radio appearance.(2)
2. Television		
(a) Local	$N \times \$70 = G_3$	N = the number of appearances of Coast Guard personnel on a local TV station. $70 is an estimate of the average value of each local TV appearance.(7)
(b) Network	$N \times \$45,000 = G_4$	N = the number of appearances of Coast Guard personnel on a TV network. $45,000 is an estimate of the average value of each network TV appearance.(8)
h. Home Town News	$N \times 6 \times .8 \times \$12 = H$	N = the number of Home Town News Releases originated. 6 is an arbitrary estimate of the average number of copies of each release distributed by FHTNC to local newspapers. .8 is an estimate of the ratio of releases printed to those distributed by FHTNC. $12 is an estimate of the average value of each release printed.(9)

Notes to the Data:

(1) Data from the American Cable TV Network was used to determine this figure.

(2) Based upon Audience Coverage and Cost Guide (13th Edition) Day "30" rate for an average network station.

(3) Based on figures obtained from the Newspaper Advertising Bureau, Inc..

(4) Based upon a review of "invoices" for Public Service Announcements from radio stations.

(5) Coast Guard distributed TV spots are 30 seconds in length. The source of the $32 figure is unknown.

(6) Based upon an arbitrary average 90 second appearance, times $10 per thirty second spot as in subsection e.

(7) Based upon an arbitrary average 60 second appearance, times $35 per thirty second spot as in subsection f.

(8) Based upon figures obtained from the Television Bureau of Advertising (TVB) 1974-75 Spot TV Planning Guide, for an arbitrary average thirty second appearance in the top 200 markets, for a prime time spot.

(9) Based upon data from the Newspaper Advertising Bureau, Inc. for the average open line rate cost in the top 295 markets, for an estimated average one column-inch release.

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